

ABSTRACT OF THE DISCLOSURE

Disclosed is a ring network in which a plurality of transmitting apparatuses are connected in ring form so as to be capable of transmitting in each of upstream and downstream directions, working and protection channels are assigned to each direction and, when failure occurs in a transmission path, a transmit signal is looped back using the protection channel to effect rescue. The ring network includes an insert transmitting apparatus that incorporates a packet, which enters from a lower-order side, into a higher-order signal and transmits the signal to a transmission path, and a drop transmitting apparatus that extracts the packet from the higher-order signal and transmits the packet to another lower-order side. Monitoring is performed to determine whether communication between the insert and drop transmitting apparatus has become unrescuable owing to transmission-path failure. When communication has become unrescuable, the insert transmitting apparatus halts the transmission of the packet to the transmission path.